1 THE RESULT

Same pallet, same lane. Up to 4.9 times the price.

Freight class is one of the first things an LTL quote asks for, and one of the least understood. Everyone agrees a higher class costs more. Few sources show how much more. So we ran the experiment: the same pallets, on the same lanes, quoted at ten different freight classes from 50 to 500, with live rates from the carriers on our platform. That is 40 quote runs and 776 carrier prices. Below is what the class number actually did to the price, which carriers ignore it, and what a wrong class could cost you.

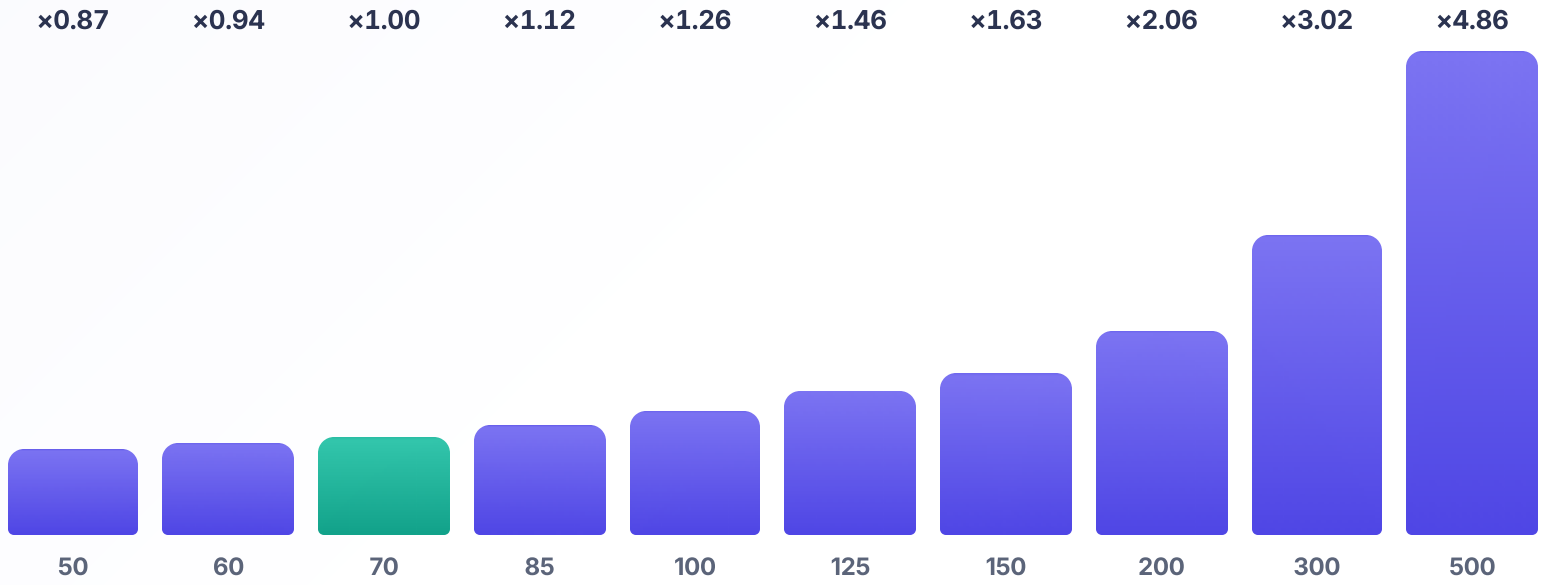
+26% typical quote at class 100 vs class 70

+106% typical quote at class 200 vs class 70

6 of 22 carriers quoted the same price at every class

4.9×

the typical quote at class 500, compared with class 70 (average of four shipments)



Freight class, 50 to 500. Class 70 is the correct density class for these pallets (18.75 lb per cubic foot).

2 TRY IT

Drag the class. Watch every carrier react.

Each bar is one carrier's lowest standard quote for the same shipment. Move the class from 50 to 500 and the carriers re-sort. Hatched bars are carriers that quoted the same price at every class.

1 pallet (1,000 lb) from Staten Island, NY to Chicago, IL. Same carriers, same order, three classes. Multiples are for this shipment; the four-shipment average at class 500 is ×4.86.



3 CARRIER BY CARRIER

Who reprices when the class changes

Each cell is a carrier's price at that class divided by its own class 70 price. Sixteen carriers climb steeply, Forward Air to about 13 times its class 70 price at class 500. Six, shown at the top, never moved. We cannot see how they rate a shipment, so we do not know why.

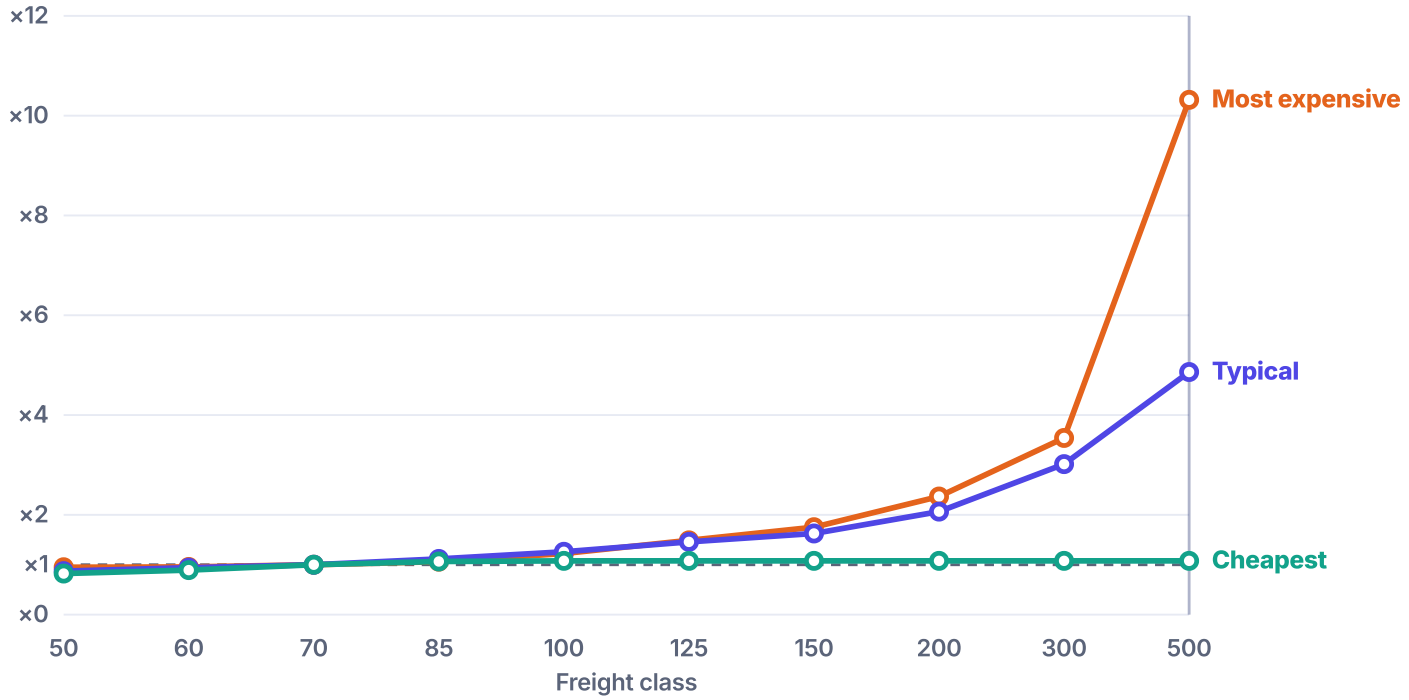
Carrier	50	60	70	85	100	125	150	200	300	500
ArcBest same at every class	×1	×1	×1	×1	×1	×1	×1	×1	×1	×1
Averitt same at every class	×1	×1	×1	×1	×1	×1	×1	×1	×1	×1
Go2 same at every class	×1	×1	×1	×1	×1	×1	×1	×1	×1	×1
Old Dominion same at every class	×1	×1	×1	×1	×1	×1	×1	×1	×1	×1
Southeastern same at every class	×1	×1	×1	×1	×1	×1	×1	×1	×1	×1
Warp same at every class	×1	×1	×1	×1	×1	×1	×1	×1	×1	×1
Roadrunner	×0.76	×0.84	×1	×1.25	×1.48	×1.89	×2.03	×2.49	×3.10	×3.14
Estes	×0.89	×0.93	×1	×1.10	×1.21	×1.42	×1.63	×2.08	×3.05	×5.12
Pitt Ohio	×0.88	×0.92	×1	×1.12	×1.26	×1.50	×1.75	×2.24	×3.24	×5.22
STG	×0.90	×0.93	×1	×1.09	×1.23	×1.48	×1.72	×2.23	×3.27	×5.36
Saia	×0.87	×0.91	×1	×1.13	×1.33	×1.60	×1.88	×2.43	×3.52	×5.69
TForce	×0.82	×0.91	×1	×1.16	×1.33	×1.64	×1.95	×2.59	×3.85	×5.80
A Duie Pyle	×0.81	×0.90	×1	×1.14	×1.30	×1.60	×1.89	×2.47	×3.64	×5.98
Ward	×0.87	×0.92	×1	×1.14	×1.30	×1.58	×1.87	×2.46	×3.66	×6.05
Central Transport	×0.86	×0.90	×1	×1.14	×1.32	×1.61	×1.90	×2.50	×3.75	×6.23
Daylight	×0.83	×0.91	×1	×1.16	×1.32	×1.71	×2.05	×2.72	×4.07	×6.32
FedEx Economy	×0.82	×0.91	×1	×1.17	×1.35	×1.64	×1.92	×2.47	×3.63	×6.65
R+L	×0.83	×0.90	×1	×1.16	×1.34	×1.62	×1.93	×2.55	×4.06	×6.74
SMT	×0.84	×0.89	×1	×1.16	×1.37	×1.71	×2.05	×2.73	×4.10	×6.84
FedEx Priority	×0.81	×0.91	×1	×1.17	×1.34	×1.64	×1.93	×2.58	×3.67	×7.14
XPO	×0.82	×0.90	×1	×1.18	×1.58	×1.94	×2.23	×3.18	×4.75	×7.91
Forward Air	×0.76	×0.83	×1	×1.04	×1.12	×1.41	×1.60	×2.11	×3.50	×13.4

cheaper than class 70 ×1 to ×9 and up

4 COMPARE CARRIERS

Compare carriers and most of the damage disappears

The typical quote climbs to 4.9 times the class 70 price. The cheapest quote rose only 2% to 17% (8% on average) because from class 85 or 100 up a flat-rate carrier set the floor on all four shipments. The most expensive carrier charged 2.1 to 2.8 times the cheapest at class 70 and 21 to 26 times at class 500.



Class 500 Most expensive carrier **×10.3** Typical quote **×4.86** Cheapest quote **×1.08**

Each line is the average, across four shipments, of that price at the class divided by the same measure at class 70. Hover a class for the values.

5 THE BILL AFTER PICKUP

What a wrong class would add

Most class mistakes surface after pickup, when the carrier weighs and measures the freight and rebills at the corrected class. Pick a shipment and a correction. The figures are the difference in base price only, before any administrative fee.

QUOTED AT → BILLED AT	TYPICAL CAUSE	TYPICAL QUOTE	CHEAPEST QUOTE
50 → 70	Class set too low, corrected to the density class	+15%	+22%
60 → 85	Class set slightly low	+19%	+20%
70 → 100	Class one step up	+26%	+8%
85 → 125	Freight is lighter or bulkier than estimated	+30%	+1%
70 → 150	Freight is much lighter than estimated	+63%	+8%
100 → 200	Very light, bulky freight	+63%	No change
70 → 200	Class doubled	+106%	+8%

Average of four shipments. Base price only: administrative and reweigh fees come on top. The cheapest quote moves less because a flat-rate carrier sets the floor.

WORKED EXAMPLE

1 pallet (1,000 lb) from Staten Island, NY to Chicago, IL: the typical quote was **$609** at class 70 and **$961** at class 150, **$352 more** (+58%) before any fee.

6 BEFORE YOU BOOK

Find your class in thirty seconds

For general palletized freight, density does most of the work: weight divided by cubic feet, then the NMFC density bands. Enter your pallet to see the density class. Some commodities have their own NMFC item that overrides density, so check the item for your product.

Example: our test pallet, 48 × 40 × 48 in at 1,000 lb

DENSITY

18.8

lb per cubic foot (53.3 ft^3)

CLASS BY DENSITY

70

NMFC density bands

Class 70 is the baseline in our study. A commodity with its own NMFC item can override the density class, so check the item for your product.

DENSITY (LB PER CUBIC FOOT)	CLASS
50 or more	**50**
35 to under 50	**55**
30 to under 35	**60**
22.5 to under 30	**65**
15 to under 22.5	**70**
13.5 to under 15	**77.5**
12 to under 13.5	**85**
10.5 to under 12	**92.5**
9 to under 10.5	**100**

DENSITY (LB PER CUBIC FOOT)	CLASS
8 to under 9	**110**
7 to under 8	**125**
6 to under 7	**150**
5 to under 6	**175**
4 to under 5	**200**
3 to under 4	**250**
2 to under 3	**300**
1 to under 2	**400**
Under 1	**500**

7 WHAT TO DO WITH THIS

Four rules that follow from 776 quotes

1

Get the class from density and the NMFC item, not a guess.

A class set too low is the usual reason for a rebill. A 70 to 100 correction added about a quarter to the typical quote.

2

Compare carriers, do not rely on one quote.

The typical quote rose to 4.9 times at class 500, but the cheapest moved only 2% to 17%.

3

Enter the real class and measurements every time.

A carrier that quoted the same price at every class can still inspect your freight and rebill if the bill of lading is wrong.

4

Ask about reclass and reweigh fees before you book.

Our figures are base-price differences only. Administrative fees come on top.

Compare live LTL rates from many carriers at transportli.com/quote/

8 METHOD

How we ran it, and what it does not show

Four benchmark shipments, ten classes each, 40 quote runs and 776 carrier prices from the carriers on our quoting platform. The data are a sample, not a price list, and not a prediction of your own bill.

776
carrier prices

40
quote runs (4 shipments × 10 classes)

22
carriers, 17 to 21 per run

Oct 14
2026 pickup date for every run

#	SHIPMENT	LANE
1	1 pallet · 1,000 lb	Staten Island, NY → Chicago, IL
2	3 pallets · 3,000 lb	Staten Island, NY → Chicago, IL
3	1 pallet · 1,000 lb	Newark, NJ → Houston, TX
4	3 pallets · 3,000 lb	Newark, NJ → Houston, TX

- Pallets are 48 × 40 × 48 in at 1,000 lb each: 18.75 lb per cubic foot, class 70 by density. Dock to dock, no accessorials.
- For every carrier we kept its lowest standard (non-guaranteed) quote. AAA Cooper, whose quotes were more than 20 times the median, was dropped.
- Two lanes, one pickup date and quotes rather than final invoices. Reclass and reweigh fees are not included.

Cite this study: Transportli, “How Much Does Freight Class Change LTL Price?”, 2026. transportli.com/blog/how-freight-class-affects-ltl-price/ · Download the quotes (CSV)